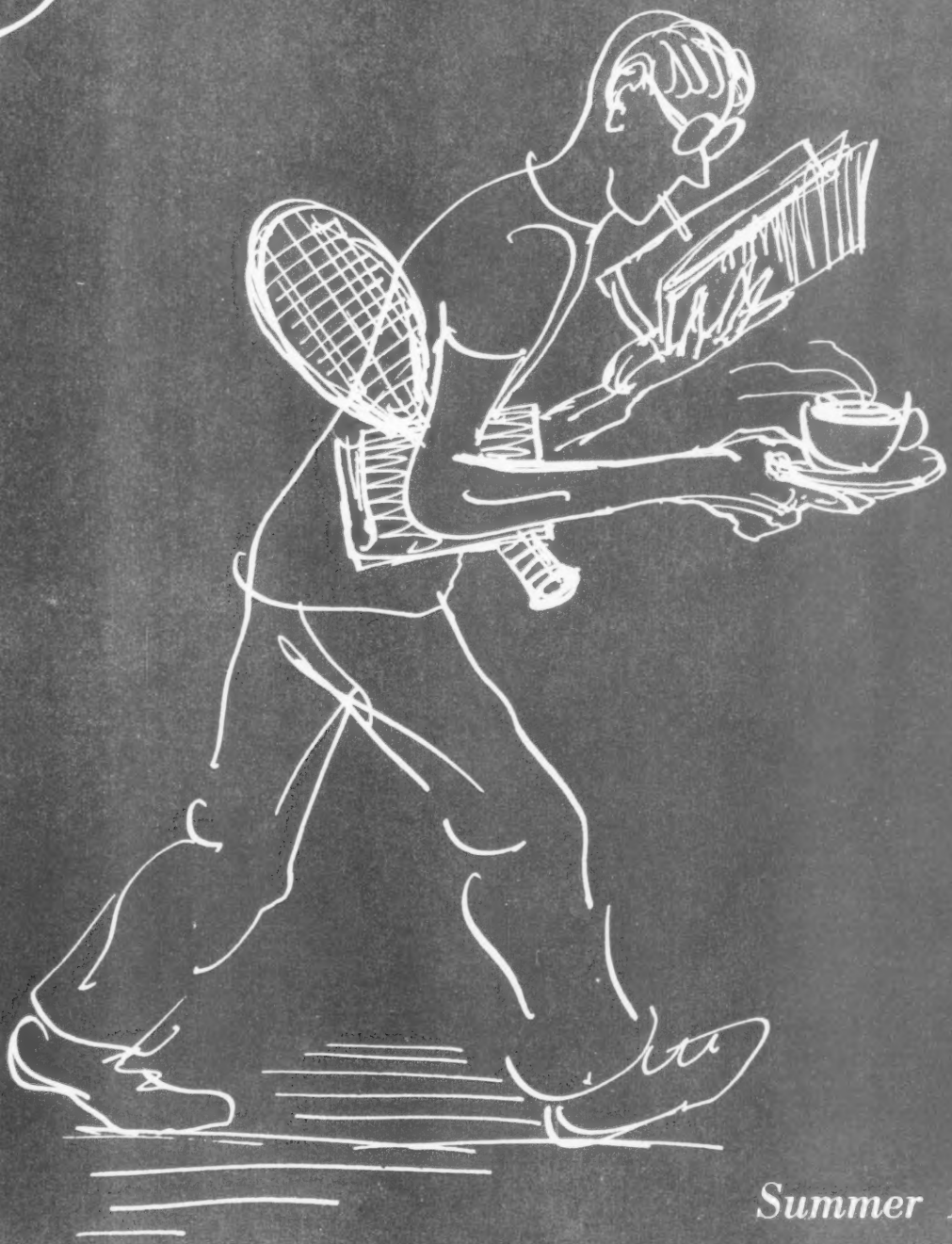
June 1953

THE Johns Hopkins MAGAZINE



Summer Exams

—SEE PAGE 16

Americans Are Rolling Up Their Sleeves!

YES, ALL KINDS OF PEOPLE ARE GIVING BLOOD SO THAT OUR WOUNDED MAY LIVE!

● Today, the blood of a Boston bookkeeper may be flowing through the veins of a wounded kid from a Kansas farm . . . the blood of a pretty Southern housewife may have saved the life of a grizzled leatherneck. For, blood is blood, a God-given miracle for which there is no substitute . . . and when a man's life hangs in the balance and blood is needed, there is nothing else to take its place!

Right now the need for blood is urgent. In hospitals —at home and overseas— many men require four and six transfusions during delicate operations. And the blood *must be there*—when it's needed. So give the most precious gift of all—*your* blood!

Be assured that giving blood is neither difficult nor distressing. And what a thrill there is in knowing that you've performed a really unselfish act! So call your local American Red Cross today and make an appointment. And tell your friends and neighbors about your experience. Let them share the wonderful feeling Americans get when they roll up their sleeves—and give blood.

But—

WHAT HAPPENED TO THAT PINT OF BLOOD YOU WERE GOING TO GIVE?

Call Your American Red Cross Today!

TENTH ANNIVERSARY

THE Johns Hopkins MAGAZINE

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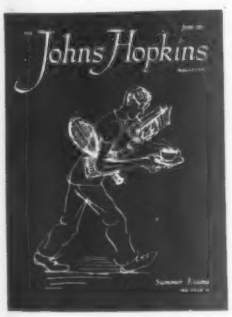

THE COVER

The sun is shining, the birds are singing, the water is cool at the seashore—and this harassed young man has an exam to take. As he studies, the temptation to toss aside his books and yield to the call of the summery outdoors is great. The young man doesn't know it, probably, but the same temptations are distracting his professor, who must sit in his office thinking up questions to ask on the exam. He suffers, too.

DRAWING BY AARON SOPHER

VOLUME IV June, 1953 NUMBER 9

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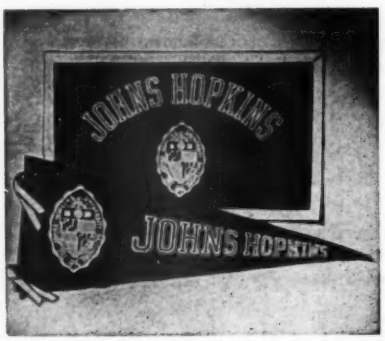
TREATS FOR SMALL FRY

A NEW HIT . . . this wonderful, *washable* jacket of Hopkins-blue poplin, treated with DuPont's durable water repellent, Zelan. It's a lightweight, unlined version of the jackets worn by members of Hopkins teams as they wait to go into the game, and any youngster would give almost anything to have one. Zippered front, two pockets, and the legend, "Hopkins, 19??" and the Hopkins jay in bright gold. Sizes 2, 4, 6, 8.....$4.25

AN OLD FAVORITE . . . our popular T-shirt for small fry, just like the ones the big boys wear. In sizes 2, 6, 8, 10, 12, 16.....$1.25



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EDITORS' NOTES
AN INFORMAL REPORT

One night last month, as we were somewhat sleepily perusing the newspaper before going to bed, we came across an item which brought us up with a start. Next day, it said, *The Johns Hopkins Magazine* was going to be deposited in a cornerstone.

Deposited in a cornerstone! The very thought made sleep impossible for us that night.

We recalled vividly the first cornerstone-laying ceremony we had ever attended (we were in the second grade, and our school was about to add a new annex). Each of us children was given a little flag to wave, and we were put through numerous rehearsals to make sure that our part of the solemn exercises went off without a hitch. On the afternoon of the affair, each of us chipped in part of his allowance—our share was a penny, we believe—and we made up a little purse to be dropped in the stone. At the appointed hour, an assorted group of bigwigs swept up to the stone-laying platform, and after what seemed to be endless speechmaking, into the stone went our purse —and our penny.

Wielding a silver trowel, one of the officials cemented the stone into place. (He must have done a sloppy job, incidentally. A couple of hours later, we noticed, a workman came along and did it all over again.)

"Children," the official said, "five hundred years from now, the Man of Tomorrow will find this stone and from it will learn many things about our day."

At the moment, we didn't care about the Man of Tomorrow; we simply wished that the Man of Today would stop talking and let us go home. The words have stuck in our memory, however; and ever since, whenever we have watched books and magazines being deposited in cornerstones, the Man of Tomorrow has been uppermost in our mind. We have always envied the editors and authors who were thus being put in communication with him.

And now the chance was to be ours! But had we already muffed it? we asked ourselves. What issue of our magazine had been selected as the message-bearer to posterity? Was it a worthy representative of our times? Or did it contain some ghastly grammatical error, for example, which might brand our age forever as an era of literary slovenliness?

We do not have the answers to these questions. By the time the next morning came, we were so worn out that we missed the ceremonies. Therefore we did not learn *which* issue was dropped into the stone. And we have not had the courage to ask anyone and find out.

"For one year I have been getting your magazine," writes a reader who is with the Atomic Energy Commission at Grand Junction, Colorado, "and there is one thing that bothers me.

"The magazine is addressed to me at the *Au*tomic Energy Commission. Although the miners out here call the AEC by many names—the Automatic Energy Commission, the Hydromatic Energy Commission, etc.—I do think it would be nice if you literary people could get it straight."

We literary people changed the man's address plate, but quick.

We never tire of looking at the drawings which architects whip up to show their clients, and the public, what a projected building is going to look like. We like these "renderings," as we understand such drawings are properly called, because they make everything look so neat and pretty—and, let's face it, so wonderfully unreal. Every hedge around the new building is squarely trimmed, every shrub is at just the right stage of growth, every pane of glass sparkles, and, best of all, every window blind is pulled down to the same level as all the other window blinds. If there is a street in front of the building, all passing automobiles are handsomely streamlined, with nary a bent fender or Model T in the lot.

Perhaps the most remarkable feature of architects' drawings is the trees. A good draftsman can, despite

what Joyce Kilmer said, make full-grown trees appear overnight in a spot where, last time anyone looked, there was only barren ugliness. (This forestation is, by the way, an activity of which we heartily approve. We only wish that it would inspire more contractors, who are entrusted with the job of carrying out the architects' directions, at least to spare from their bulldozers whatever trees may *already* be on the building site.)

Into our dream-world of architects' drawings, however—into a little grove of architects' trees, in fact—there has strayed a note of reality this month. But here, for once, reality is even pleasanter than make-believe. We spotted it in the corner of one of the drawings of new Hopkins buildings which we reproduce on pages 22 and 23 of this issue, and our heart has been gayer ever since. Look closely, and note what a romantic draftsman has carved upon one of his trees:

Unfortunately, in order to fit the space available in our "New Buildings" article, we had to chop off the grove of trees in which this carving appears. Made us feel like one of those building contractors.

As Johns Hopkins rounds out another academic year this month and we another volume of this magazine, a lull settles over the campus and our office. But not for long. The campus will perk up in a few days as students and faculty arrive for the University's summer session; *we* will be using the summer months to get a head start on the next volume of magazines, which begins in October. We have a number of projects under way about which we are genuinely excited. When you see them in print sometime next year, we hope you like them, too.

Meanwhile, have a happy summer.

JACOB L. HAIN

Investment Adviser

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THE HOPKINS CLUB OF NEW YORK

Here is long-awaited news for Hopkins alumni living in or near Manhattan, or who visit the city: a permanent home for the Johns Hopkins Club of New York! The location and facilities are outstanding: living quarters for both permanent and transient guests; a dining room, cocktail lounge, stag bar, and library; congenial surroundings indeed for good fellowship and entertaining.

Resident membership (for those living *or* working in the New York area).....$35 per year

Non-Resident Membership (for those living *and* working outside a 50-mile radius of New York)...$15 per year

Recent graduates (alumni who have not completed three years since beginning employment or self-employment, and who do not reside permanently at the Club): $10 for the first two years and $15 for the third year

Address inquiries to the membership chairman, Bernard S. Meyer, 17 East 63rd Street, New York 21.

THE JOHNS HOPKINS CLUB
OF NEW YORK

106 West 56th Street, New York 19, N. Y.

A NEW POST FOR DR. BRONK

He will resign from the presidency of Johns Hopkins to head the Rockefeller Institute for Medical Research

On June 23, the Rockefeller Institute for Medical Research held a meeting in New York to elect a new head. The man they chose is Detlev W. Bronk, president of Johns Hopkins, who will resign from the University presidency as soon as his successor is selected.

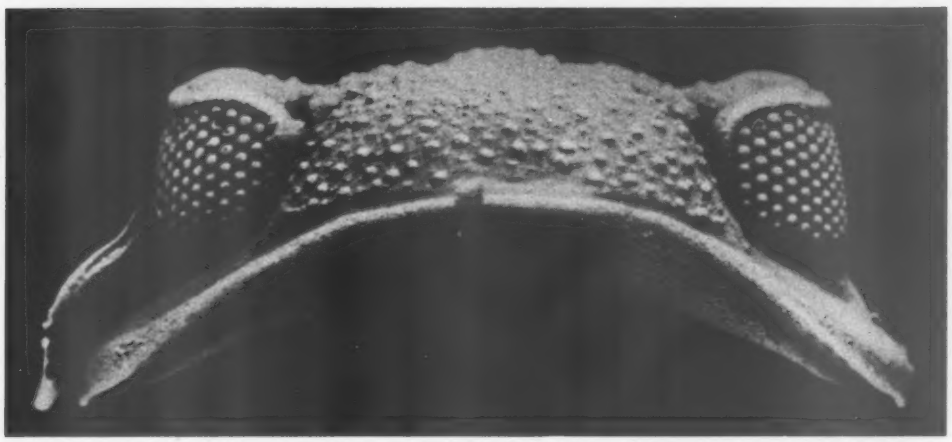
The possibility of Dr. Bronk's leaving has been under discussion by the Hopkins Board of Trustees for some time, and plans for an orderly transition are already well under way. Dr. Bronk himself has been elected a member of the Hopkins Board. "My high regard for the ideals of the Hopkins and my affection for her faculty would have prevented my decision [to accept the Rockefeller Institute post]," Dr. Bronk has said, "had I not envisioned many ways in which I can continue to serve this University under the terms of my new appointment."

Dr. Bronk, a distinguished biophysicist and scientific administrator, became the sixth president of Johns Hopkins on January 1, 1949. Under his leadership the University faculties inaugurated a new academic plan, in keeping with Hopkins traditions but bold in its concepts. It involved the breaking-down of barriers between undergraduate and graduate studies and the crossing of barriers between academic disciplines; and it permits students to proceed with their studies at their own pace. Despite Dr. Bronk's own strong protests whenever he hears the term, the program has been referred to widely—and will probably continue to be known—as the "Bronk Plan."

In the Rockefeller Institute post, Dr. Bronk follows David Rockefeller, grandson of the founder, as president. The post of president of the Board of Scientific Directors, which will now be absorbed by the president of the Institute, had been held by William H. Welch and Warfield T. Longcope of Johns Hopkins. Herbert S. Gasser, who is retiring as director of the Institute after seventeen years in the position, received his M.D. at Hopkins in 1915.

The Rockefeller Institute for Medical Research, one of the world's great medical institutions, formerly had two boards: a board of trustees, for policy matters, and a board of scientific directors. Now the two boards will be merged, and the entire Institute operation will be under the direction of one man—Dr. Bronk—for the first time.

TRILOBITE HUNTER



FRANCO RASETTI

A nuclear physicist spends his spare time searching for this fossilized historian of life on the earth a quarter of a billion years ago

"THE race of man," it has been written, "will perish. But the eyes of trilobites eternal be in stone."

The trilobite is an extinct marine arthropod which lived between five hundred and two hundred fifty million years ago. It is so called because its body is divided into three lobes: a median lobe and two lateral ones. The trilobite generally ranged in size from one to four inches, although some were close to two feet in length. Its modern relative is the horseshoe crab.

According to one authority, trilobites "boasted the greatest size if not the highest intelligence of any animals then on earth." They were so numerous that they made up close to sixty per cent of the known fauna during the geological period called the Cambrian. They were the scavengers of their day, swimming along the bottom of the seas in search of their prey. When attacked they drew in their delicate legs and rolled their bodies into a tight ball. Some trilobites who were unable to ward off their attackers have been found, fossilized, in this very position.

Trilobites had a quarter of a billion years to romp on the ocean floor before their day of reckoning came. Then, about two hundred fifty million years ago, they became extinct. When they died, many of them were covered with a coating of mud and sand. Through millions of years, more mud and sand were added, fossilizing the trilobites and preserving them as the historians of their day.

Dr. Franco Rasetti and his finds

FRANCO DINO RASETTI is a modern trilobite champion. Dr. Rasetti is not a geologist or paleontologist by trade; he is professor of physics at Johns Hopkins and one of the early pioneers, working in Italy with Enrico Fermi, in the study of atomic energy. He has been collecting trilobites, as a hobby, for only twelve years. But he has done so with such distinction that this spring the National Academy of Sciences conferred upon him one of its highest awards, the Walcott Medal in geology and paleontology.

As an antidote to his work in nuclear physics, Dr. Rasetti's pursuit of such hobbies is carried on with a notable thoroughness. While probing the atom at the University of Rome, he used his spare time to build an enormous collection of a peculiar type of beetle—that type which dwells in caves. (His collection, one of Italy's largest, is now in the Municipal Museum of Zoology at Rome, and whenever Dr. Rasetti returns to Italy for a visit, he makes a point of dropping in to see it.) Earlier, Dr. Rasetti's hobby was mountaineering, and between 1917 and 1938 he scaled

FRANCO RASETTI

Each of the trilobite's eyes is made up of many individual lenses fitted into a curved band (the band is visible in the center of the photograph at left). The whole area, shown here from the left side and on page 5 from the front, is little more than a quarter of an inch deep in this variety of trilobite, which Dr. Rasetti found in the province of Quebec.

Normally the trilobite swam about with his body stretched open, as in the photograph at right. But when attacked he curled himself into a tight ball, much as does today's porcupine when in danger. Some of the tiny animals, apparently unable to ward off their attackers, died in this defensive position, and their fossilized bodies look like patterned stones.

many of the highest peaks in the Alps, plus making the first winter climb of Mount Whitney, the highest mountain in the United States.

Mountain-climbing is a handy skill in searching for trilobites. At the time he was in Italy and tackling the icy slopes of the Alps, however, Dr. Rasetti had no knowledge of trilobites and had never, in fact, so much as studied a paleontology textbook. Only in the forties, after political conditions in Italy had deteriorated intolerably and Dr. Rasetti had moved to North America, did he begin to make himself an authority on the subject.

Dr. Rasetti's first American post, for which he sailed from Italy in 1939, was at Laval University in Quebec. As soon as he was settled, he began looking around for a new hobby to replace the cave-dwelling beetles which he had left behind, and learned that hunting for trilobites would probably, in that section of the world, prove to be one of the most fruitful.

In the Cambrian period, when trilobites flourished, no forms of life had yet emerged from the seas. In order to find fossils dating from that time, a searcher must work in an area in which, over the intervening millions of years, an extraordinarily fortuitous combination of events has occurred.

First, since in the Cambrian period no life had yet found its way onto land, the hunting ground must be an area which was under the sea at that time. Next, in the course of the world's great upheavals over many millennia, during which whole continents were formed and destroyed, the once-sunken area must have been uplifted, so that it is now a part of dry land and thus accessible to man. Third, the fossils must have been sufficiently covered by overlying strata of earth to protect them from the erosive elements, which might otherwise have erased their traces forever. On the other hand (a fourth requirement), they must at no time have been so deeply buried that their structures have been altered beyond recognition. And finally, they must not *now* be deeply buried, if they are to be found in significant quantity by man.

This is a stiff set of requirements for any region of the earth to have satisfied over a span of a quarter-billion years. And few regions have. During the Cambrian period, for example, life existed in an area which is now part of the State of Illinois, but its fossilized remains are buried nearly a mile beneath the earth's surface and have been found only by the accidental "strike" of an oil drill, five thousand feet down—a depth at which large-scale, systematic explorations are clearly impractical.

In some sections of Canada, however, the almost-impossible set of conditions has been met. When Dr. Rasetti heard this, and also learned that there were great gaps in man's knowledge of life in the Cambrian period, he decided that his search for a new hobby was at an end. He has been hunting for trilobites, and finding them in record-breaking numbers, ever since.

Every trilobite fossil, even if it is only a fragment of the original animal, has a story to tell to the trained observer.

One geologist describes the beginning of the Cambrian period as "the date of reckoning in geologic history as significant as the invention of the printing press in human history." For starting with the early Cambrian period, it is possible to present the history of a whole present-day continent in systematic fashion. Largely responsible for man's ability to trace back geologic events that far is the trilobite, which by

Continued on page 31

Lowell J. Reed

DR. REED, retiring vice president, holds and lives the conviction that one is meant to work and to work hard. He is a great and tireless teacher (his introductory lecture in Biostatistics 1, never the same from year to year, was a classic which drew listeners from all over the Medical Institutions). He is also a great administrator (he headed the Hopkins School of Hygiene before becoming vice president, and internationally is a leading force in medical and public-health affairs). His extraordinary talent, one intimate colleague remarked recently, is to face a problem, influence its solution, but never become engulfed by it.

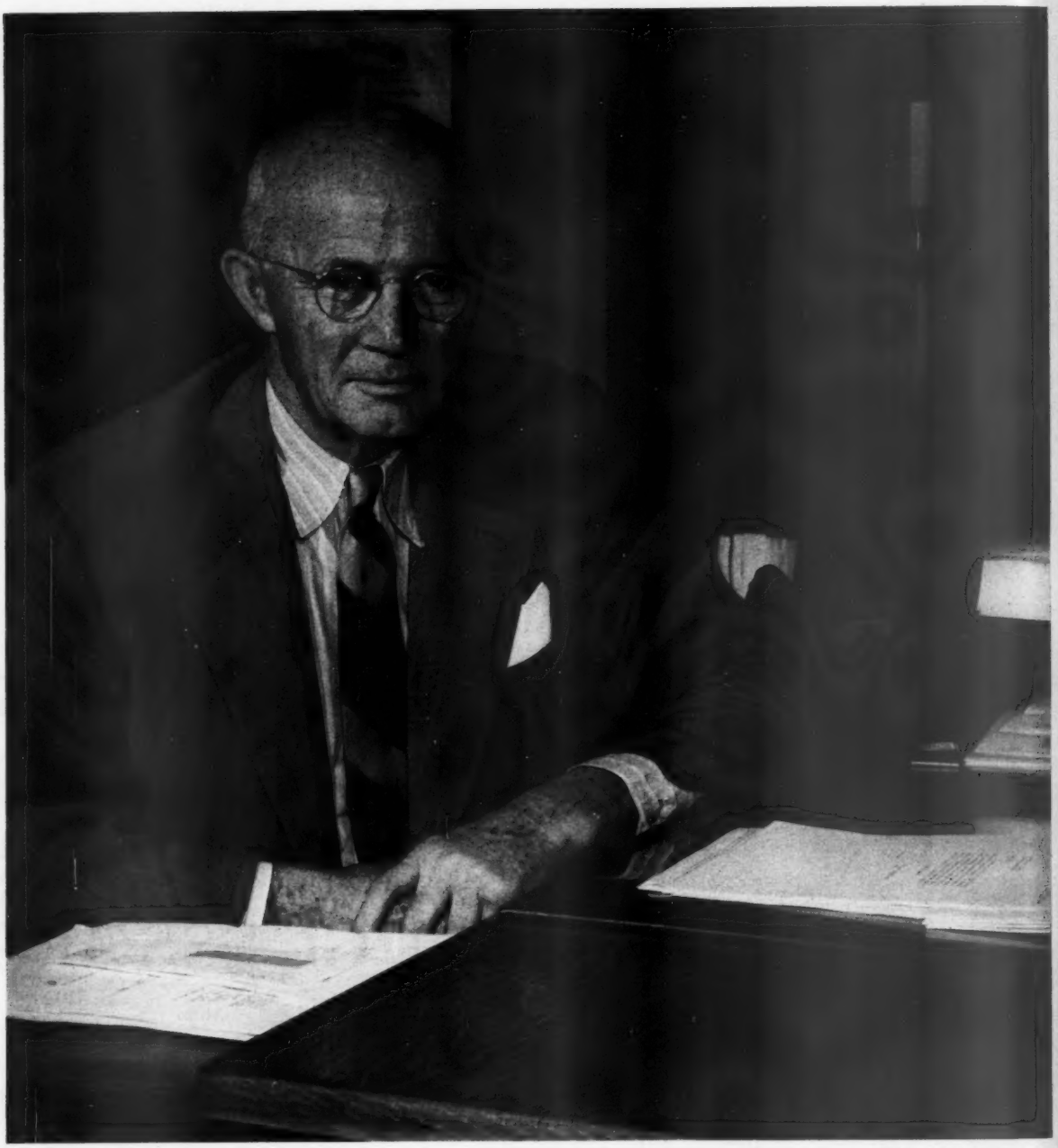
THREE RETIRING HOPKINS LEADERS —AND A PAIR OF THEIR SUCCESSORS

ON June 30, three great leaders at Johns Hopkins step down from their posts. They are men who have occupied unique roles in the history of the University. Their contributions to its progress are inestimable.

Two—Lowell J. Reed (*opposite*), retiring vice president of the Hopkins Hospital and University, and Alan M. Chesney (*page 15*), retiring dean of the School of Medicine—between them have served the Johns Hopkins Medical Institutions for nearly sixty years. The third—William B. Kouwenhoven (*next page*), retiring dean of the School of Engineering—has been associated with his School for nearly forty years, as long as the School itself has been in existence.

On these pages, prepared on the eve of their retirements, is a portfolio of their portraits. Here, too, are pictures of the successors of two of them: the new dean of the School of Medicine and the new dean of the School of Engineering, who take office on July 1. In the third post, the Hospital and University vice presidency, no successor has yet been named, and for the present the Medical Planning and Development Committee will exercise the duties of the post.

ROBERT M. MOTTAR



WEBER, JHU ILLUSTRATIONS

In School of Engineering, William B. Kouwenhoven retires . . .

DEAN KOUWENHOVEN joined the Hopkins faculty in 1914, became professor of electrical engineering in 1930, and has headed his School since 1938. A prolific researcher, he has recently been collaborating with Hopkins medical scientists on the development of apparatus to bring about the recovery of the human ventricular fibrillating heart, when the chest is opened and the heart exposed. Although he is retiring from the deanship, Dr. Kouwenhoven will continue his work as professor of electrical engineering at the University.

WEBER, JHU ILLUSTRATIONS

. . . And Robert H. Roy is appointed to follow him as dean

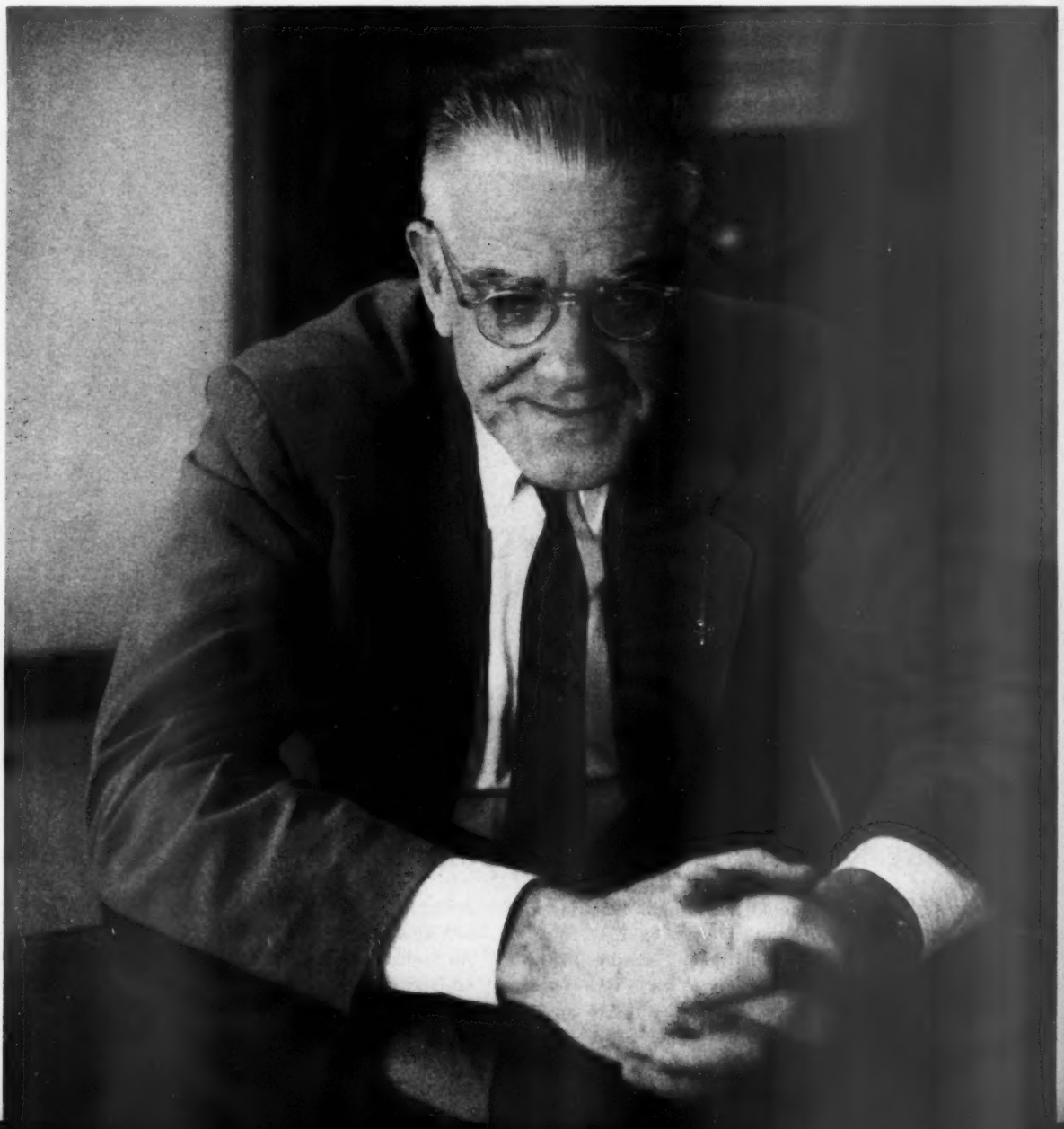
DEAN ROY, who graduated from Johns Hopkins in 1928, returned to the University in 1947 to organize the department of industrial engineering. In the interim, he had been with Waverly Press in Baltimore, where he and his colleagues were the first to apply industrial-engineering techniques to a craft industry, setting a pattern for the printing and other craft trades. An industrial-relations expert, he has served as a labor arbitrator in some thirty cases of disputes involving companies and labor unions.

Philip Bard succeeds Alan M. Chesney as Medical School dean

DEAN BARD, who as professor of physiology and director of the department of physiology at the Hopkins School of Medicine has won international recognition for his work, will carry on his teaching and scientific research while dean. His investigations, which have included studies of the brain mechanisms involved in animals' emotional behavior and of the "pattern of representation" of touch and other sensory systems in the brain, have brought him innumerable honors, including four honorary doctorates here and abroad.

DEAN CHESNEY has been a militant leader of the maintenance of high academic standards in medical education and has fought for freedom from restriction, whether from government or private sources, in the conduct of medical schools and scientific research. He won his B.A. degree at Johns Hopkins in 1908 and his M.D. in 1912. He returned as associate professor of medicine in 1921 and became dean in 1929. He will continue to work on his chronicle of Hopkins medical history, the first volume of which appeared in 1943.

ROBERT M. MOTTAR



ROBERT M. MOTTAR

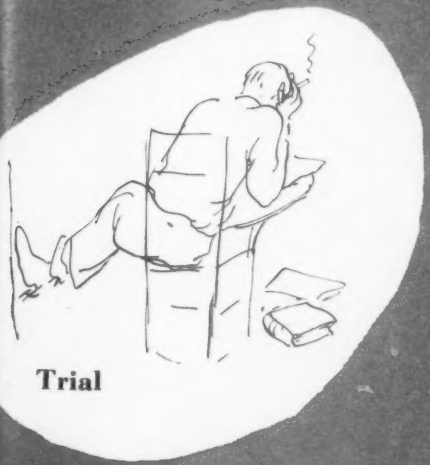
Aaron Sopher's Impressions

EXAM-WEEK D

Panic

Nonchalance

K DAZE



Trial

Verdict

FREE!

COURTESY DOUGLAS H. K. LEE

In Yuma, Arizona, scientist determines how large an area of human subject's body is exposed to direct radiation from sun by tracing subject's shadow.

With Hardy radiometer, indirect radiation in the area is measured (*above*). Air movement (*below*) and humidity (*left*) are also carefully determined.

WERNER WOLFF, BLACK STAR

With mobile laboratory, Douglas H. K. Lee can test human reactions to climate almost anywhere. *Above*, measurement of direct solar radiation.

Traveling Climate

It is summertime, and nearly everybody is reacting to the heat. Everyone, with weapons which range from mint juleps to soda pop, from iced tea to hot, from chill baths to steamy, is fighting it in his own way. But what, actually, *are* the effects of such climatic extremes on man? What do changes in temperature and humidity do to the human and his functioning? Now, with a new laboratory-on-wheels, Johns Hopkins researchers can reproduce virtually any climate in the world and take it almost anywhere to test people's reactions to it: how jungle duty may affect a soldier from Maine; what a cold wave might do to a Tahitian. On these and the following pages is a glimpse of how they work.

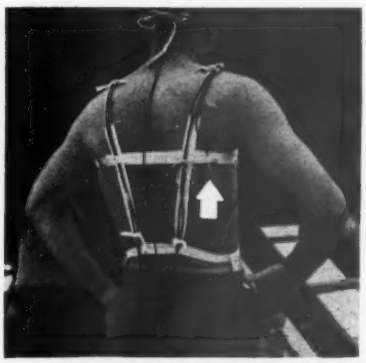
TRAVELING CLIMATE

Continued

WERNER WOLFF

COURTESY DOUGLAS H. K. LEE

Subject's over-all sweating is measured by weighing before and after tests *(above)*. Apparatus at the left measures sweating in pecific areas of human body.



COURTESY DOUGLAS H. K. LEE

Thermocouple harness records man's skin temperature on potentiometer.

WERNER WOLFF

Hand potentiometer also can be used to determine subject's skin warmth.

COURTESY DOUGLAS H. K. LEE

WERNER WOLFF

As man walks treadmill (*right*), pulse-rate is recorded. Air which he exhales is collected in bag (*above*) and metered to determine his oxygen usage.

Lab permits testing on a wide scale

To learn how men adapt themselves to climate, and how they are affected by changes from the climate which they are used to, the Hopkins researchers, in their mobile lab, can create whatever combination of climatic conditions they desire. Then, people of varying backgrounds are tested in it. What happens to their skin temperature? To their sweating? To their metabolism? The laboratory is equipped to find out, and to make records of the findings.

"In particular," says Douglas H. K. Lee, professor of physiological climatology, "we want to study the response of many different kinds of people to heat—people of different occupations, of different races, accustomed to various climates, at different levels of nutrition, with different economic and social backgrounds."

Dr. Lee's mobile laboratory was built at Johns Hopkins for the Army Quartermaster Corps, which has a natural interest in the effect of climate upon man and his requirements for clothing, shelter, and food.

PALMER, FISHER, WILLIAMS, AND NES, ARCHITECTS

◀ New engineering hall will fill last space in Gilman Hall quadrangle at the University.

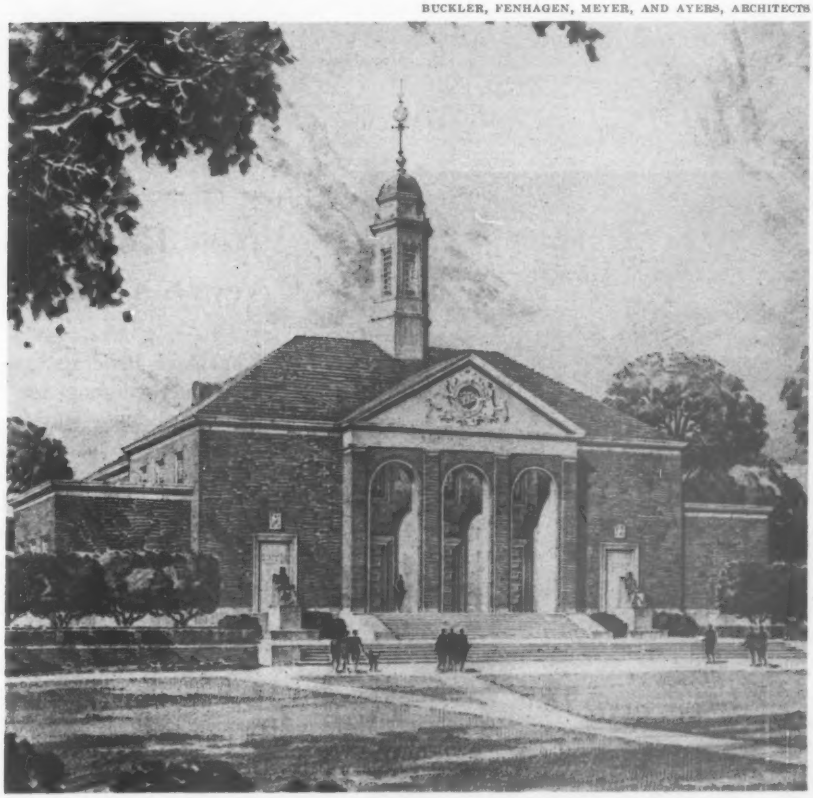
WRENN, LEWIS, AND JENCKS, ARCHITECTS

New dormitory (*above*) will provide housing for 358 additional students at Hopkins.

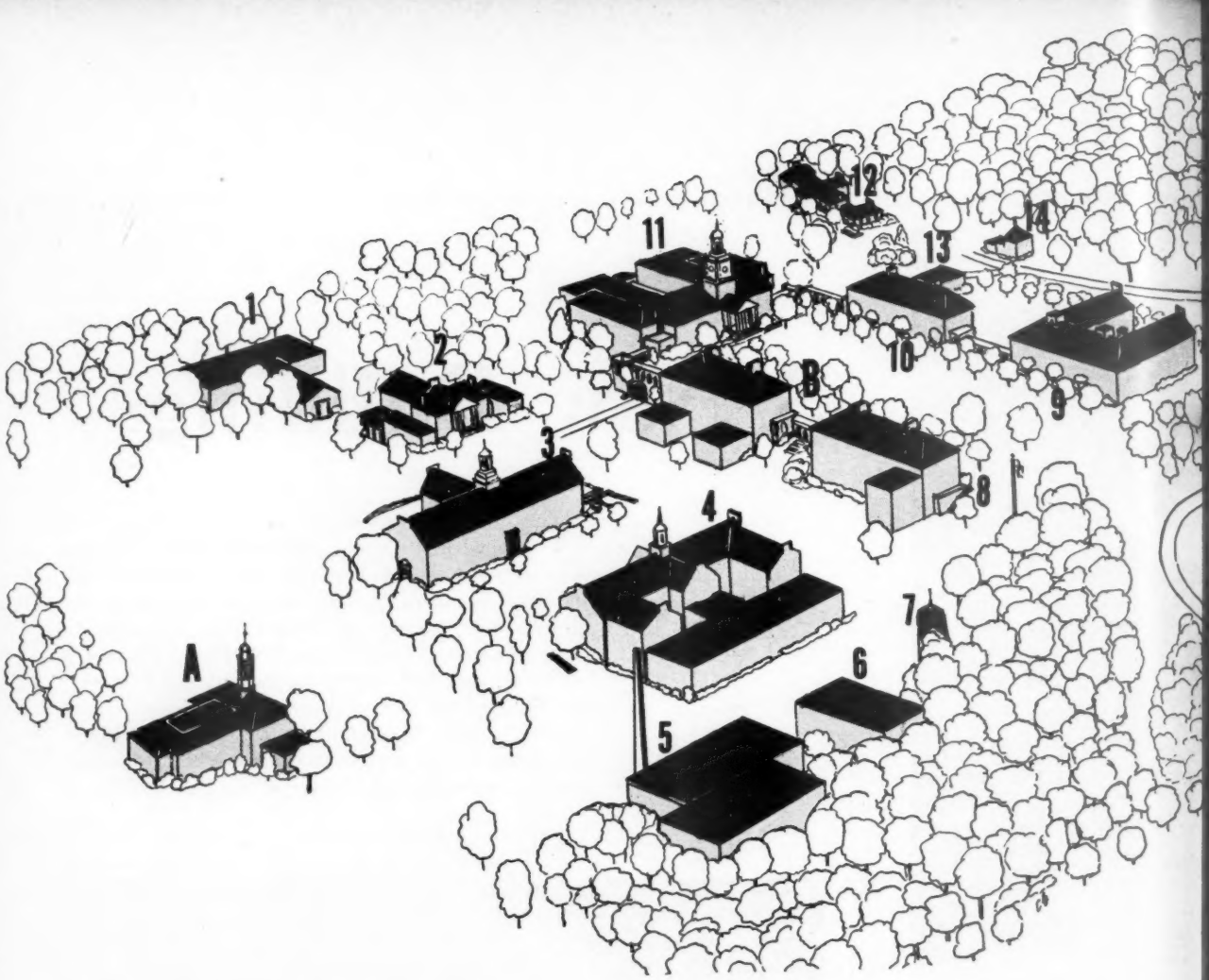
3 New Buildings

Not since the University moved to its Homewood campus in the early 1900's has Johns Hopkins seen as much building activity as is going on this summer. On a single day last month, ground was broken for two new buildings—a $1.69 million dormitory to house 358 students (*left*) and a $1.5 million engineering structure—and the cornerstone was laid for a third—the $1.6 million Shriver Lecture Hall (*below*). None was to be built from the University's general funds. For details of the new buildings' financing and a map showing where they will rise, see the following page.

BUCKLER, FENHAGEN, MEYER, AND AYERS, ARCHITECTS



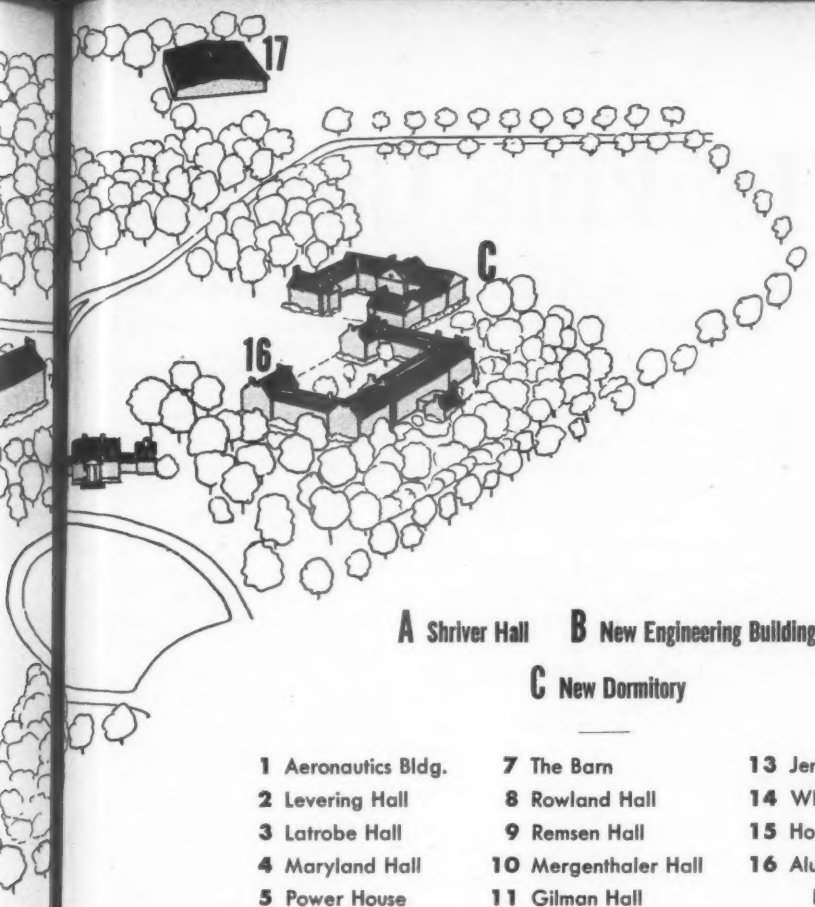
Shriver Lecture Hall will have auditorium seating 1,200 and a smaller room holding 200. ➤



New Homewood buildings serve a variety of needs

The three buildings going up at Homewood will provide badly needed room for the Engineering School (which for years has been straining its present space), for student housing (now inadequate, forcing many men to find off-campus lodging-places), and for lectures and other public affairs. The engineering hall is being paid for with money appropriated by the State of Maryland, the dormitory with a federal housing loan to be repaid out of income, and the lecture hall with funds left for this purpose by the late Alfred Jenkins Shriver.

◄ Maryland's Governor McKeldin breaks ground for engineering hall.



Letters on this drawing of Homewood mark the new buildings (*see key below*).

A Shriver Hall **B** New Engineering Building

C New Dormitory

---

1 Aeronautics Bldg.
2 Levering Hall
3 Latrobe Hall
4 Maryland Hall
5 Power House
6 Whitehead Hall
7 The Barn
8 Rowland Hall
9 Remsen Hall
10 Mergenthaler Hall
11 Gilman Hall
12 Hopkins Club
13 Jenkins Hall
14 White House
15 Homewood House
16 Alumni Memorial Dormitory
17 Gymnasium

Here is the first unit in Medical Institutions' program

There is relentless pressure at the Hopkins Medical Institutions for new plant development. Rapid improvements in clinical methods and expanding medical research are demanding constant modernization, alteration, and expansion. The building at the right (as yet unnamed, and designated in Hopkins records only as "Reconstruction Unit No. 1") will house facilities which will aid the work of nearly every department, including an emergency room, surgical operating theaters, out-patient clinics, laboratories, and a vast medical records room designed to serve the entire Hospital.

A Johns Hopkins Gazette

AN UNOFFICIAL COMPENDIUM OF FACULTY AND ALUMNI APPOINTMENTS, HONORS, AND ACCOMPLISHMENTS

BOOKS

Laurence B. Chenowith, B.A. '14, and T. K. Selkirk: *School Health Problems.*

Paul Forchheimer, G. '37–'38 (German): *The Category of Person in Language.*

George Gamow, FAC. '34–'35 (Physics): *The Moon.*

Leon Howard, PH.D. '29 (English): *Victorian Knight-Errant;* also *Herman Melville.*

John E. Kieffer, M.SC. '35 (Hygiene): *Strategy For Survival.*

Victoria Lincoln, FAC. '49–'50, '51–'52 (Prose Fiction): *Wild Honey.*

Robert M. MacIver, FAC. '34–'35 (Political Science), editor: *Moments of Personal Discovery.*

THE FACULTY

● PRESIDENT DETLEV W. BRONK delivered the commencement address at Notre Dame University and was awarded an honorary doctor of laws degree. He received an honorary doctor of science degree from Harvard University at the commencement exercises in Cambridge.

On June 25 Dr. Bronk was scheduled to give the address at the dedication of the new Dorrance Laboratories of Biology and Food Technology at the Massachusetts Institute of Technology.

● AMONG MEMBERS OF THE BOARD OF TRUSTEES, John J. McCloy has been elected a director of the Westinghouse Electric Corporation. He was awarded an honorary degree of doctor of laws at graduation ceremonies at Columbia University.

● LOWELL J. REED is retiring this summer as vice president of the University and the Hospital. (*See page 11.*)

● AMONG MEMBERS OF THE UNIVERSITY ADMINISTRATIVE STAFF, Homer Halvorson has resigned as librarian of the University, a post he has held since 1943. Sidney Painter, professor of history, has been named acting librarian for the coming academic year.

Harold E. Ingle, director of the Johns Hopkins Press, has been elected secretary-treasurer of the Association of American University Presses.

● IN THE FACULTY OF PHILOSOPHY, Vern L. House and Robert Van Reen have been promoted to assistant professors of biology. Dr. Van Reen is also a member of the McCollum-Pratt Institute.

André T. Jagendorf has been named assistant professor of biology. A graduate of Cornell and of Yale, Dr. Jagendorf has been working at the University of California at Los Angeles.

Carl P. Swanson, professor of botany, has been awarded a Guggenheim fellowship to carry on his studies of the effects of combined radiations on the hereditary materials of living cells. Dr. Swanson has been working in the biology division of the Oak Ridge National Laboratories, Tennessee.

Alsoph H. Corwin, professor of chemistry, has been given an honorary doctor of science degree by Marietta College, Ohio.

Kemp Malone, Donovan Professor of English Literature, was awarded an honorary degree of doctor of humanities by the University of Chicago at commencement exercises.

Hillis Miller has been appointed assistant professor of English for the coming academic year. Dr. Miller has been teaching at Williams College.

George F. Carter, professor of geography, has been awarded a Guggenheim fellowship to study soils and archaeology in the San Diego region of California, with reference to the antiquity of man in America.

William F. Albright, Spence professor of Semitic Languages, was given one of the 1953 Lord & Taylor Awards at the sixteenth annual awards luncheon in New York. The awards are given yearly to four persons who are deemed "intellectual adventurers whose great contributions stem from their creative and nonorthodox approach to their fields of endeavor." Other winners were George S. Stevenson (Hopkins M.D. '19), Edward R. Murrow, and Theodore von Karman, with a special award going to Albert Einstein.

Arthur O. Lovejoy, professor emeritus of philosophy, has been awarded an honorary degree of doctor of letters by Harvard University. He was cited as "a philosopher and historian of ideas, who has studied man's mind and its conceptions in their long context of time."

Franco D. Rasetti, professor of physics, has been awarded the Charles D. Walcott Medal of the National Academy of Sciences for his "eminent contributions" in a specialized field of geology. (*See "Trilobite Hunter," beginning on page 6 of this issue.*)

Carl B. Swisher, Stran Professor of Political Science, was awarded an honorary doctor of letters degree at commencement exercises at Pomona College, California.

Anna Granville Hatcher, associate professor of Romance languages, has been awarded a Guggenheim fellowship for research in the field of comparative syntax.

● AT THE SCHOOL OF ADVANCED INTERNATIONAL STUDIES, Philip W. Thayer, dean, is on a six-month leave of absence during which he is traveling and lecturing in Southeast Asia. During May and June he lectured at the University of Malaya, the University of Indonesia, and the University of Chulalongkorn in Bangkok. Dean Thayer will later be at the University of Rangoon, where he will teach a summer-session course on international law and also give a special series of lectures for judges of the Supreme and High Court and members of the Rangoon Bar Association.

C. Groves Haines, professor of diplomatic history, is serving as acting dean of SAIS until Dr. Thayer's return in September.

PAINTING BY I. HUNNER PARSONS

Alfred Blalock

● AT THE SCHOOL OF MEDICINE, Alan M. Chesney is retiring this summer as dean, a post he has held since 1929. Dr. Chesney will be succeeded as dean by Philip Bard, professor and director of the department of physiology. (*See pages 14 and 15.*)

George W. Corner, professor of embryology, has been elected vice president of the National Academy of Sciences. The director of the Baltimore laboratories of the Carnegie Institution of Washington, Dr. Corner has spent the past year as George Eastman Professor at Oxford University, England.

Isadore A. Siegel, lecturer in obstetrics, has been appointed director of the department of obstetrics and gynecology at Franklin Square Hospital, Baltimore.

Bernard Becker, instructor in ophthalmology, has been named professor and head of the department of ophthalmology at the Washington University School of Medicine.

Helen B. Taussig, associate professor of pediatrics, has been awarded the College Medal of the American College of Chest Physicians.

Alfred Blalock, professor and director of the department of surgery, has been given the 1953 Distinguished Service Award of the American Medical Association, the AMA's highest honor. Dr. Blalock was awarded the medal and citation in recognition of his work in many areas of the field of vascular surgery.

Curtis Marshall, assistant professor of neurological surgery, has been elected to the board of the Mental Hygiene Society of Maryland.

George E. Bennett, adjunct professor emeritus of orthopedic surgery, was awarded an honorary doctor of science degree at commencement exercises at Hampden-Sydney College.

J. A. Campbell Colston, associate professor of urology, has been elected president of the American Urological Association.

● IN THE SCHOOL OF ENGINEERING, William B. Kouwenhoven is retiring this year as dean after fifteen years in that post. Dr. Kouwenhoven will continue as professor of electrical engineering. He will be succeeded as dean by Robert H. Roy, professor and chairman of the department of industrial engineering and formerly assistant dean of the School of Engineering. (*See pages 12 and 13.*)

Leonard Topper has been appointed assistant professor of chemical engineering for the 1953–54 academic year.

● IN MCCOY COLLEGE, Richard A. Mumma has been named dean. An associate professor of education, Dr. Mumma has been acting dean for the past year.

● AMONG MEMBERS OF THE HOSPITAL ADMINISTRATIVE STAFF, Ruth L. Kuehn, formerly public relations assistant, has been appointed director of volunteer services.

● AT THE SCHOOL OF HYGIENE AND PUBLIC HEALTH, Winston Harvey Price has been promoted to the rank of associate professor of biochemistry.

Paul A. Meier has been appointed assistant professor of biostatistics for the next academic year.

● AT THE APPLIED PHYSICS LABORATORY, Raymond L. Ely has joined the BBE group. Before coming to APL he served in the Air Force at Wright Patterson Air Force Base in Dayton, Ohio.

G. Hamilton Mowbray, who recently completed postgraduate studies at Cambridge University, England, has been appointed a research psychologist.

Arthur J. Wahl, formerly of the Wright Patterson Air Force Base, has taken the post of engineer in the Research Center.

THE ALUMNI

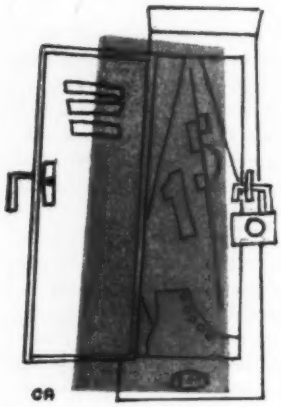
Lyman J. Briggs, PH.D. '01 (Physics), has received from the Scientific Apparatus Makers Association an award for outstanding achievement in fulfilling his responsibilities to American scientific and technical professions. Dr. Briggs was director of the National Bureau of Standards from 1933 to 1945.

Charles Markell, Sr., B.A. '02, was awarded an honorary doctor of laws degree by Goucher College.

James J. Waring, '04–'07 (Medicine), has been awarded the Trudeau Medal of the National Tuberculosis Association for his medical achievements in the field of tuberculosis.

Horace E. Flack, PH.D. '06 (Political Science), has resigned after forty-five years as director of the Bureau of

The Year In Hopkins Sports: 1952-53



A compilation, arranged alphabetically by sports, of varsity scores and standings during the past academic year

BASEBALL

Rutgers	5;	Hopkins	3
Hopkins	14;	Catholic	3
Ursinus	6;	Hopkins	4
Gettysburg	9;	Hopkins	2
Hopkins	7;	Washington	1
Loyola	3;	Hopkins	2
Hopkins	8;	Swarthmore	2
Maryland	6;	Hopkins	2
Hopkins	5;	Western Maryland	1
Delaware	6;	Hopkins	4
Hopkins	11;	Towson Teachers	2
Hopkins	9;	American	1
Hopkins	1;	Western Maryland	0
Loyola	8;	Hopkins	1

MASON-DIXON CHAMPIONSHIP SERIES

Hopkins, winner of the Northern Division, and Randolph-Macon, winner of the Southern Division, met on May 15 at Hopkins to decide the conference championship in a best-two-out-of-three-game series. Hopkins won the first two games, 3–0 and 2–0.

BASKETBALL

Hopkins	69;	Dickinson	54
Hopkins	70;	Swarthmore	54
Delaware	80;	Hopkins	76
Virginia	80;	Hopkins	56
Navy	77;	Hopkins	50
Gettysburg	96;	Hopkins	59
Hopkins	84;	Catholic	52
Hopkins	75;	Towson Teachers	47
Rutgers	102;	Hopkins	95
Hopkins	81;	Washington	69
Hampden-Sydney	69;	Hopkins	62
Loyola	74;	Hopkins	70
Hopkins	72;	Western Maryland	52
Hopkins	83;	Towson Teachers	57
Hopkins	89;	Randolph-Macon	76
Loyola	83;	Hopkins	69
Hopkins	73;	Western Maryland	61

CROSS-COUNTRY

Washington	21;	Hopkins	38
Hopkins	18;	Loyola	39
Delaware	26½;	Hopkins	28½
Hopkins	22;	Catholic	35
Hopkins	28;	Swarthmore	28
Hopkins	23;	Gettysburg	36

MASON-DIXON CHAMPIONSHIP TOURNAMENT

Bridgewater	54	Catholic	122
Hopkins	67	Gallaudet	133
Towson	93	Lynchburg	153
Washington	115	Hampden-Sydney	195

Don Manger, of Hopkins, successfully defended his title as individual champion.

FENCING

Navy	21;	Hopkins	6
Hopkins	16;	Temple	11
Hopkins	16;	Lafayette	11
Hopkins	15;	Haverford	12
Hopkins	16;	N. C. State	11

FOOTBALL

Franklin & Marshall	19;	Hopkins	13
Carnegie Tech	40;	Hopkins	6
Hampden-Sydney	28;	Hopkins	25
Hopkins	48;	Susquehanna	20
Randolph-Macon	28;	Hopkins	25
Hopkins	33;	Swarthmore	9
Hopkins	32;	Dickinson	14
Hopkins	12;	Western Maryland	0

FINAL CONFERENCE STANDING

Randolph-Macon	Western Maryland
Hampden-Sydney	Bridgewater
Hopkins	Gallaudet

GOLF

Dartmouth	7;	Hopkins	2
Maryland	8;	Hopkins	1
Hopkins	6;	Western Maryland	3
Franklin & Marshall	5;	Hopkins	4

Delaware	6;	Hopkins	3
Hopkins	6;	Gettysburg	3
Loyola	8;	Hopkins	1
Juniata	7;	Hopkins	2

FINAL CONFERENCE STANDING

Loyola	Catholic
Hopkins	Baltimore
Western Maryland	Randolph-Macon
American	

LACROSSE

Hopkins	16;	Loyola	7
Virginia	14;	Hopkins	8
Hopkins	15;	Princeton	11
Hopkins	14;	Swarthmore	13
Army	8;	Hopkins	7
Navy	7;	Hopkins	4
Maryland	8;	Hopkins	6
Mt. Washington	13;	Hopkins	8

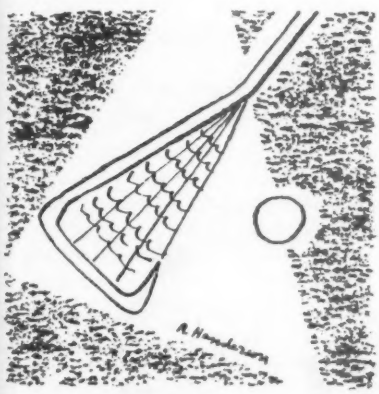
SOCCER

Hopkins	6;	Gettysburg	2
Hopkins	4;	Western Maryland	2
Hopkins	4;	Bucknell	3
Hopkins	3;	Towson Teachers	1
Drexel	1;	Hopkins	0
Maryland	2;	Hopkins	1
Hopkins	1;	Washington	0
Hopkins	6;	Delaware	5
Hopkins	3;	Loyola	1

FINAL CONFERENCE STANDING

*Baltimore	Western Maryland
*Hopkins	Loyola
Towson Teachers	Roanoke
Washington	

*Ended season in tie; Baltimore won playoff 3–1.



TENNIS

Hopkins	8;	American	1
Hopkins	9;	Gettysburg	0
Hopkins	7;	Delaware	1
Hopkins	7;	Loyola	2
Hopkins	5;	Western Maryland	4
Hopkins	8;	Washington	1
Maryland	9;	Hopkins	0
Hopkins	8;	Western Maryland	1
Hopkins	9;	Towson Teachers	0
Catholic	6;	Hopkins	3
Hopkins	5;	Loyola	4

MASON-DIXON CHAMPIONSHIP MATCH

Hopkins, winner of the Northern Division, met Catholic, winner of the Southern Division, on May 16 at Hopkins to decide the conference championship. Catholic University won, 8–1.

TRACK

Gettysburg	70;	Hopkins	52
Delaware	94;	Hopkins	37
Catholic	73;	Hopkins	40
Swarthmore	70;	Hopkins	55
Loyola	67;	Hopkins	65

MASON-DIXON CHAMPIONSHIP MEET

Catholic	41½	Western Maryland	8
Hopkins	40	Randolph-Macon	7½
Roanoke	29	Gallaudet	6
Bridgewater	23½	Lynchburg	5
Loyola	21	Washington	2
Hampden-Sydney	13½	Mt. St. Mary's	¾
Towson Teachers	8¾		

WRESTLING

Virginia	24;	Hopkins	5
Delaware	16;	Hopkins	12
Hopkins	26;	Loyola	7
Catholic	16;	Hopkins	12
Hopkins	22;	Swarthmore	8
Gettysburg	27;	Hopkins	3
Franklin & Marshall	28;	Hopkins	5

MASON-DIXON CHAMPIONSHIP TOURNAMENT

Baltimore	33	Catholic	14
Gallaudet	29	Towson Teachers	12
Loyola	22	Western Maryland	4
Hopkins	16		

Legislative Reference for the Baltimore City Council and the Maryland General Assembly. He has been succeeded in the post by Carl N. Everstine, PH.D. '38 (Political Science).

Frank G. Breyer, B.A. '08, M.A. '10 (Chemistry), was awarded an honorary doctor of engineering degree by Clarkson College of Technology.

The late Douglas Southall Freeman, PH.D. '08 (History), LL.D. (hon.) '48, was awarded an honorary doctorate of humane letters by Washington College in May, two weeks before his death. Dr. Freeman made the chief commencement address, speaking on "Washington and the Training of Leaders."

Grover F. Powers, M.D. '13, FAC. '16–'21, was awarded the 1953 John Howland Award at the May convention of the American Pediatric Society. He is professor emeritus of pediatrics at Yale.

Carl J. Weber, B.A. '14, FAC. '20–'21 (English), has resigned as chairman of the English department of Colby College, a position he has held since 1921. He will continue as director of the college press and as curator of rare books and manuscripts.

Gertrude C. Bussey, G. '16–'17, FEL. '20–'23, '25–'28 (Philosophy), has retired as professor of philosophy at Goucher College. She has been a member of the Goucher faculty since 1915.

Walter B. Martin, M.D. '16, has been named president-elect of the American Medical Association, to take office in June of 1954. A native of Norfolk, Virginia, Dr. Martin is chief of the medical service at St. Vincent de Paul Hospital in Norfolk.

Lawrence S. Kubie, M.D. '21, FAC. '22–'24 (Psychiatry), '24–'26 (Physiology), has been named president-elect of the American Psychosomatic Society.

Jacob E. Finesinger, B.A. '23, M.A. '25 (Zoology), M.D. '29, has been elected to a council position in the American Psychosomatic Society.

Paul W. Bachman, B.S. '23 (Chemistry), PH.D. '26, has been elected vice president of the Davison Chemical Corporation.

James D. Hardy, PH.D. '30 (Physics), has been named professor of physiology at the University of Pennsylvania and scientific director of the Aviation Medicine Acceleration Laboratory at the U. S. Naval Air Development Center, Johnsville, Pennsylvania.

James G. McManaway, PH.D. '31, FAC. '31–'32, '33–'35 (English), has been

awarded a Guggenheim fellowship to carry on studies of the life of Shakespeare. Dr. McManaway is consultant in literature and bibliography at the Folger Shakespeare Library.

Norman A. Cameron, M.D. '33, FAC. '33–'38 (Psychiatry), has left the University of Wisconsin, where he was professor of psychiatry and psychology, to become professor of psychiatry at Yale.

Charles Henry Buck, Jr., B.A. '35, PH.D. '38 (Latin), G. '41–'42 (Greek), has been named the new dean of St. Paul's Cathedral, Boston, the appointment to become effective next fall. He is now professor of the New Testament at Episcopal Theological School, Cambridge, Massachusetts.

Eric F. Goldman, M.A. '35, PH.D. '38, FAC. '38–'42 (History), was awarded one of the two 1953 Bancroft Prizes by Columbia University. The prizes are given each year for distinguished writing in the field of American history, diplomacy, or international relations, and Dr. Goldman won it on the basis of his *Rendezvous With Destiny*. He is an associate professor of history at Princeton.

Theodore Lidz, FAC. '38–'51 (Psychiatry), '47–'51 (Medicine), has been named secretary-treasurer of the American Psychosomatic Society.

Edward C. Hammond, SC.D. '38 (Hygiene), has been appointed professor of biometry at Yale. He has been director of statistical research for the American Cancer Society.

Edward M. Corson, '38–'40 (Arts), PH.D. '46 (Physics), has been appointed adjunct professor in theoretical physics in the School of Graduate Studies, New York University. Dr. Corson has held the post of senior scientist in mathematical physics at the N. Y. U. Institute for Mathematics.

James H. Potter, FAC. '45–'49 (Mechanical Engineering), DR. ENG. '48, has been named professor and head of the department of mechanical engineering and also associate dean at Stevens Institute of Technology.

Erwin H. Ackerknecht, FEL. '42–'44 (History of Medicine), has been awarded the William H. Welch Medal of the American Association of the History of Medicine. He is professor of the history of medicine at the University of Wisconsin Medical School.

George G. Guido, Jr., B.A. '50, has been promoted to regional director of the southwest area for the American Arbitration Association.

Alexander Koyre, FAC. '51–'52 (History of Medicine, History of Science), has been appointed Kemper K. Knapp Visiting Professor at the University of Wisconsin.

J. Carroll Bateman, B.S. '52, has been appointed assistant chairman of the Eastern Railroad Presidents Conference.

Stanley Newman Werbow, PH.D. '53 (German), has been appointed assistant professor of German at the University of Texas.

DEATHS

Harvey Montreville Andrew, M.D. '15, March 10, 1950.

Harriet Bailey, GRAD. NURSE '08, May 23, 1953.

Edward Ambrose Bechtel, B.A. '88, G '88–'89, '92–'93 (Latin), July 11, 1950.

H. Melvin Bull, '05–'06 (Arts), May 6, 1953.

John Hendley Burnhart, G. '01 (Botany), October 11, 1949.

Joseph S. Chamberlain, PH.D. '99 (Chemistry), May 13, 1953.

Ernest S. Edlow, B.A. '17, M.D. '21, April 25, 1953.

William Thurber Fales, SC.D. '24 (Hygiene), Resident Associate in Biostatistics, May 22, 1953.

Douglas Southall Freeman, PH.D. '08 (History), LL.D. (hon.) '48, June 13, 1953.

John A. Grubb, '31–'32 (Engineering), May 10, 1953.

William Travis Howard, G. '89–'90, '91–'94 (Histology), FAC. '30–'41 (Biology, School of Hygiene), May 23, 1953.

Bartlett Burleigh James, PH.D. '95 (History), G. '01–'02, May 16, 1953.

John M. Love, G. '99–'00 (Biology), M.D. '04, December 6, 1952.

B. B. Vincent Lyon, M.D. '07, May 20, 1953.

Carroll Russell Mettee, '03–'04 (Arts), April 27, 1953.

John Izard Middleton, G. '87–'88 (Chemistry), '99–'00 (Bacteriology), House Staff '96–'97 (Medicine), March 20, 1953.

Carrie Gutman Moses, M.A. '28, G. '30–'34 (Chemistry), April 22, 1953.

Charles W. Peppler, B.A. '92, PH.D. '98 (Greek), May 12, 1953.

Robert Victor Seliger, FAC. '28–'53 (Neurology), '32–'39 (Psychiatry), Assistant in Neurology, April 24, 1953.

Hugh M. Smallwood, B.S. '24, PH.D. '27, FAC. '27–'29 (Chemistry), April 27, 1953.

Lindsay Coleman Spencer, B.A. '01, May 12, 1953.

George B. Sybert, M.D. '23, April 27, 1953.

David Tenner, FAC. '30–'31 (Medicine), May 30, 1953.

Kaufman S. Thalheimer, B.S. '36 (Economics), May 21, 1953.

Lyttleton Morgan Tough, Jr., B.A. '04, April 17, 1953.

Milton Sheldon Van Dusen, PH.D. '21 (Physics), May 20, 1953.

John A. Wachter, B.E. '33, May 15, 1953.

Franklin Clark Wagenhals, M.D. '13, March 15, 1953.

Arthur Judson Warner, P.A.E. '92 (B.E. conferred '27), March 24, 1953.

Arthur Charles Watkins, B.A. '95 April 24, 1953.

Waldo A. Werckshagen, '04–'06 (Arts), April 28, 1953.

Andrew Yeomans, FAC. '46–'47 (Preventive Medicine), April 17, 1953.

Spare-Time Trilobite Hunter

Continued from page 8

ROBERT M. MOTTAR

all odds is the most significant fossil found in the Cambrian rocks and the most important spokesman for the period.

From their study of trilobites, scientists now have a good picture of the distribution of oceans and land masses five hundred million years ago. Since all living things were, at that time, ocean-dwelling, it is obvious that any Cambrian rock which contains fossils must have been under water then.

Furthermore, thanks largely to the traits of trilobites, paleontologists have been able to determine which areas in the Cambrian world bordered upon what is now the Pacific Ocean and which areas came in contact with the Atlantic. All trilobites of Atlantic origin were of different species from those inhabiting the Pacific. The differences, though subtle, can be recognized in fossilized remains, and from them the outlines of Cambrian oceans can be deduced.

Trilobites found in Newfoundland, for instance, are of the Atlantic species. But in such widely separated places as Greenland, the St. Lawrence valley, Pennsylvania, and Virginia, other kinds —"Pacific types"—have been found. The trilobites of the Atlantic and the Pacific did not mix. Therefore, keeping the species apart, a narrow strip of land appears to have run from Greenland to Alabama. Maryland, for example, does not seem to have been in contact with the Atlantic, but touched the Pacific. (The mutual exclusiveness of marine life in the two oceans still holds true today. In the Panama Canal region, two distinctive types of marine animals are found in the Atlantic and the Pacific, even though there are only fifty miles of land between them. A study of the area once showed around five hundred species of shell-bearing invertebrates in the Pacific and around eight hundred species in the Atlantic. Only twenty-four were found that were common to both sides.)

A FOOT of Cambrian-period muck, in which trilobites may have been trapped, has compressed over the ages into about two inches of rock. In some sections of the Canadian Rockies there are fourteen thousand feet of such rock. On the basis of the twelve-inch-to-two ratio, these strata were formed from mud which must have been nearly sixteen miles deep.

Locating a one-inch fossil in rock masses of such magnitude is no mean task. Even in thinner strata, the job of finding only a few trilobites requires the examination of vast quantities of rock. "For eight years," Dr. Rasetti recalls, "I worked for two or three days a week in the Quebec area. I left a trail of tons of gravel behind me."

In his laboratory Dr. Rasetti has a rock crusher, a diamond disc, and dentists' tools. The crusher pounds hard rock into stones of manageable size. The diamond-fitted disc cuts even the toughest trilobite-bearing rock into smaller fragments. After most of the rock has been cut away, Dr. Rasetti uses his dental tools to remove the last stubborn particles from the trilobite itself.

Most trilobites must be removed from rock in this manner, but not all. In the Shenandoah Valley of Virginia, for instance, Dr. Rasetti has collected trilobite-bearing limestone. He brings home slabs of such rock, puts them on a piece of cheesecloth in his back yard, and douses them with hydrochloric acid. Since limestone dissolves in the acid, soon nothing is left on the cheesecloth but trilobites—which, instead of turning into limestone over the years, considerately turned into quartz. Upon quartz, hydrochloric acid has no effect.

Dr. Rasetti, patiently bringing trilobites to light in these ways, has built a collection which is exceeded in size only by that of the National Museum in Washington. He has some ten thousand specimens in all, stored in a row of tall wooden cabinets in his office in Rowland Hall, the physics building at Johns Hopkins. Some are packed in flat, rectangular boxes bearing such labels as Gold Flake, Players, and Black Cat, the brand names of Canadian cigarettes which many fossil-hunters favor as much for the handy character of their containers as for the quality of their smoke.

FOR a man who had never attended a geology lecture in his life, Dr. Rasetti shot into prominence in the field with startling rapidity. Within a relatively short time after taking up trilobite-collecting as a hobby, he had produced five or six learned papers. They took veteran geologists and paleontologists by surprise. Since Cambrian-period research is a fairly limited business, most of its practitioners were well acquainted with one another, but no one had ever heard of Rasetti. "Whose student is he?" they asked.

Professor Marshall Kay of Columbia, who as a leading authority on the Paleozoic era was in touch with virtually all studies of the Cambrian period

Spare-Time Trilobite Hunter

Continued from page 31

(the earliest part of the Paleozoic era), decided to clear up the matter by inviting Dr. Rasetti to lecture before the New York Academy of Science. This was Dr. Rasetti's formal introduction to professional geologists and paleontologists and constituted a sort of "coming-out" ceremony for him in his new field. Since then, other forms of recognition have been accorded him, climaxed by the National Academy's Walcott Medal this spring. He is a fellow of the Geological Society of America and of the Paleontological Society. He has had numerous papers published on the subject. And for three years running, he received a grant enabling him to search for trilobites in the Rockies. All of these activities have been in addition to his regular intensive work in nuclear physics, which, he reiterates, is his professional field. But despite his repeated insistence on this point, many persons refuse to recognize his paleontological work as "merely a sideline." Striking proof of this came recently when an American university urged him to become professor of geology on its staff. Assuring its administrators that paleontology *is* only an avocation with him, Dr. Rasetti politely but firmly declined the offer.

DR. RASETTI received his early training in his native Italy. He began his college work at the University of Pisa and then was a lecturer at the University of Florence for several years. In 1927 he joined the faculty of the University of Rome, and it was there that he and other physicists joined forces with Enrico Fermi.

Under Fermi (who later won the Nobel Prize for his contributions in nuclear physics), Dr. Rasetti and his colleagues performed many experiments with slow neutrons. They readily saw that if practical utilization of atomic energy were ever to be made, it would be through a mechanism in which the slow neutrons were involved.

Others had previously tried to invade the inner sanctum of the atom but with moderate success. Frédéric Joliot and his wife, Irene Curie, had attempted to pierce the electrical field of the atom by using positive alpha rays. But most of the rays were repulsed. Perhaps, thought Fermi and his colleagues, the neutron would be able to pierce the field. After all, they reasoned, the neutron—unlike the positive alpha rays—is electrically neutral and probably would get through.

When the physicists experimented with the idea, however, something happened which they had not bargained for: like a fast-moving golf ball which passes right over a hole, the neutron sped through the atom at a rate too fast to be effective.

A method was needed to slow the neutron down. The physicists found their answer by shooting neutrons through paraffin. Thus they reduced the neutron's speed, and this, in turn, opened the way to the creation of plutonium, which is capable of being fissioned and used in atomic explosions.

The physicists patented their method in 1935, both in Italy and in the United States. Shortly after granting the patent, however, the United States government expropriated it, along with other patents that dealt with matters important to the country's then-accelerating defense program.

Meanwhile Italy's political situation was growing more ominous. Dr. Rasetti, along with several of his colleagues, decided to come to America.

ROBERT M. MOTTAR

Some fossils may be detached from their rocky home with hydrochloric acid, but dental tools must be used on others.

He left his post as professor of spectroscopy at the University of Rome and sailed for Quebec. He remained at Laval University until 1947, when he joined the physics department at Johns Hopkins.

The next year, discussions were reopened between the United States government and the members of the Fermi group who had collaborated in the atomic experiments at Rome. The negotiations revolved around the atomic-energy patent of 1935, and some million dollars were at stake.

The negotiations are still going on. But each passing year, Dr. Rasetti says, has brought "new technicalities and complications." Taking expenses and taxes into account, he feels that his chances of owning a small fortune someday are rather remote.

In addition to his work on slow neutrons, Dr. Rasetti has done research on cosmic rays and artificial radioactivity produced by neutrons. For his work in physics, as for his part-time activity with trilobites, he has received honors: knighthood in the Order of Ouissam Alouite in Morocco, the Righi Prize of the Academy of Science in Bologna, the Mussolini Prize of the Royal Academy, to list a few.

BUT whenever he gets a chance, Dr. Rasetti hits the trilobite trail. Since this often involves mountain-climbing, it serves as his athletic activity as well as a scholarly pastime.

He views with a tinge of regret the fact that he must limit his climbing to the easier mountains today, even though the peaks which he describes as "easy" would appear rather forbidding to most people.

Dr. Rasetti's yardstick for measuring the difficulty of climbs is his memory of a particularly challenging experience on the Matterhorn.

"The trip," he says, "took us twice as long as usual. The elements were against us, and we had no guide. Not only did we have to contend with fiercely blowing winds, but there was also a sheer coating of ice on our route. We had to hack out a hole in the ice for every step we took. At thirteen thousand feet, limp from hunger and cold, we managed to stumble into a little hut and fortify ourselves with a few bread crumbs."

Contrasted with that, he says, his present explorations seem a little tame.

WERNER WOLFF, BLACK STAR

NEXT ISSUE

"I can see him now as he arrived in Baltimore harbor on the Hamburg boat. He was wearing a stiff black hat and the curly locks were welling out beneath the brim. He was a born artist and during his forty-eight years in Baltimore he revolutionized medical illustrating in the United States and Canada . . . He will be recognized as the greatest medical illustrator who ever lived." Thus spoke Dr. Thomas Cullen of Max Broedel, who established at Johns Hopkins the first classes in medical illustrating and headed the Department of Art as Applied to Medicine, the first of its kind in the world. Today, the Broedel influence still inspires the work in medical illustration at Johns Hopkins; in October, with photographs by Werner Wolff and brilliant examples of medical art, *The Johns Hopkins Magazine* tells its story.

THE JOHNS HOPKINS MAGAZINE

The Reds Broke Through

Marine S/Sgt.
Archie Van Winkle
Medal of Honor

ATTACKING IN DARKNESS, a superior Red force had smashed through B Company's defense line, near Sudong. Staff Sergeant (now Second Lieutenant) Van Winkle's platoon lay pinned under murderous fire. The entire Company faced destruction.

Passing a command through his platoon, the sergeant leaped from cover, led a desperate rush against the enemy. A bullet shattered his left elbow, but he kept going. The left-flank squad got separated. Sergeant Van Winkle dashed 40 yards through heavy fire to bring it in. An exploding grenade seriously wounded his chest. Still, lying on the ground, he continued to direct the fighting.

Finally he was evacuated, unconscious from loss of blood; but the breakthrough had been plugged, the Company saved.

"I found out firsthand," says Sergeant Van Winkle. "that the Reds respect only one thing—strength. But America has plenty, thanks to our armed forces who serve in the field—and good citizens at home who invest in our country's Defense Bonds! I believe in Bonds—as savings to protect my family and as strength to protect my country. I own them—and I hope you do, too!"

★ ★ ★

Now E Bonds pay 3%! Now, improved Series E Bonds start paying interest after 6 months. And average 3% interest, compounded semiannually when held to maturity. Also, all *maturing* E Bonds automatically *go on* earning—at the new rate—for 10 *more* years. Start investing in Series E Bonds through the Payroll Savings Plan; you can sign up to save as little as $2.00 a payday if you wish.

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